U.S. Army Contracting Command

Incentive Contracts – What You Need to Know

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Program

- The Carter Initiative Emphasis on FPI-F Contracts
- Overview of FPI-F Arrangement
- The Recommended Geometry and It’s Implications
- Price Impacts Relative to FFP Contracts
- Non-price Impacts Relative to FFP Contracts
- Resources

CARTER INITIATIVE
USE OF INCENTIVE CONTRACTS

Carter Initiative

- Encouraged use of more FPI-F contracts as alternative to FFP and CPAF contracts
- The objective is to re-emphasize incentives to performance:
  - Avoid the subjectivity of CPAF awards
  - Make cost part of the incentive
- Expectation is that FPI-F will lead to better cost control on low-rate production contracts relative to FFP contracts

Carter Initiative

- DFARS Case 2011-D10 implemented this Initiative.
  - DFARS 216.403-1 amended
  - PGI now accompanies DFARS 216.403-1
  - Does not mandate use of FPI-F or specific formula
  - Does require contracting officer to document when terms depart from recommended formula
  - Higher level approval required if more than 120% ceiling

OVERVIEW OF INCENTIVE CONTRACTS

When Do We Use Incentive Contracts

- When cost estimates are not firm enough to fix a price (variance is 7% of more)
- Where technical solutions need to be developed
- Where manufacturing techniques need to be developed
- (CPIF) Where designs are not firm
- Note: If many changes are expected, CPIF may be better fit than FPI

Overview – FPIF Contract Elements

- Target Cost
- Target Price
- Share Ratios
  - Share ratio for underrun of target cost
  - Share ratio for overrun of target cost
  - Need not be the same ratio
  - Government share always appears first
- Ceiling Price

Overview – Billing and Financing

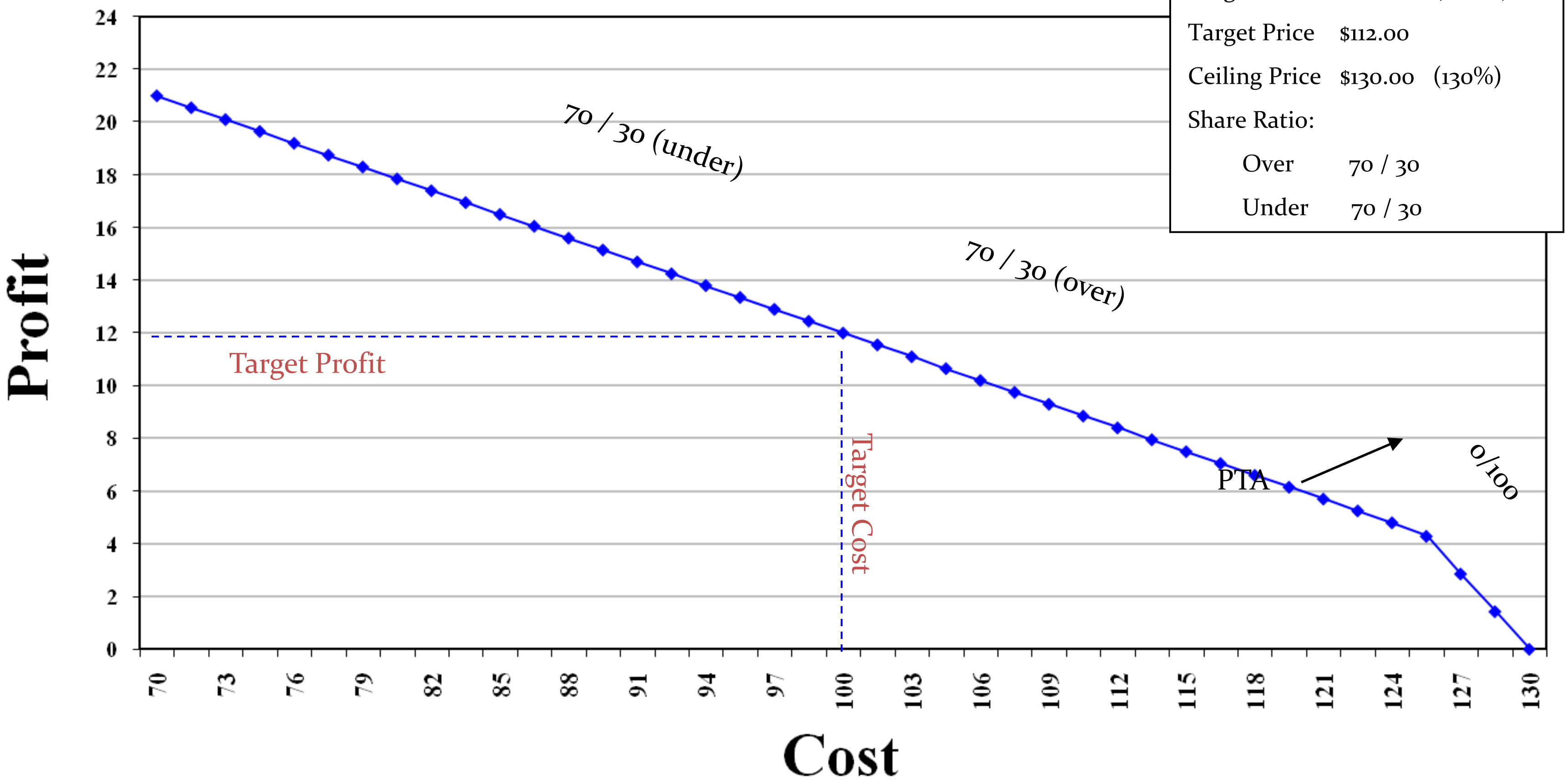
- Contractor invoices for deliverables on FPI
  - Public voucher for cost on CPIF
- FPI contracts eligible for Progress Payments and Performance-based Payments financing
  - CPIF is cost reimbursable, not eligible for financing
- Billing prices drive both invoices and financing limits. (More on billing prices later.)

Overview – Point of Total Assumption

- PTA is an analytic concept, it does not appear in the contract
- PTA is point at which contract behaves as a firm fixed price contract
- Contractor absorbs all cost increases beyond this point
- Lower price than ceiling price
  - Relationship to ceiling depends on profit rate and share ratio for overruns

FPIF GRAPH
($ Mil)

Target Cost	$100.00	
Target Profit	12.00	(12.0%)
Target Price	$112.00	
Ceiling Price	$130.00	(130%)
Share Ratio:		
Over	70 / 30	
Under	70 / 30	



Cost Incentive Geometry

- Cost Incentives are not one-size-fits-all
  - Each element of cost incentive structure is important
  - Don’t just focus on Target Cost & Target Fee or Profit

- The geometry (Share Lines, Min & Max Fees, Ceiling Price) is what creates the incentive

- The geometry can be a powerful tool in the reaching settlement

Incentive Geometry
Understanding the Geometry

Financially, which offer is the best for the Govt?

	A		B		C	
Target Cost	**$100.0M**		**$94.0M**		**$112.0M**	
Target Profit	**12.0M**	**12.0%**	**13.8M**	**16.7%**	**8.4M**	**7.5%**
Target Price	**$112.0M**		**$107.8M**		**$120.4M**	
Ceiling Price	**$130.0M**	**130%**	**$130.0M**	**138%**	**$130.0M**	**116%**
Share Ratio						
Over	**70 / 30**		**70 / 30**		**70 / 30**	
Under	**70 / 30**		**70 / 30**		**70 / 30**	

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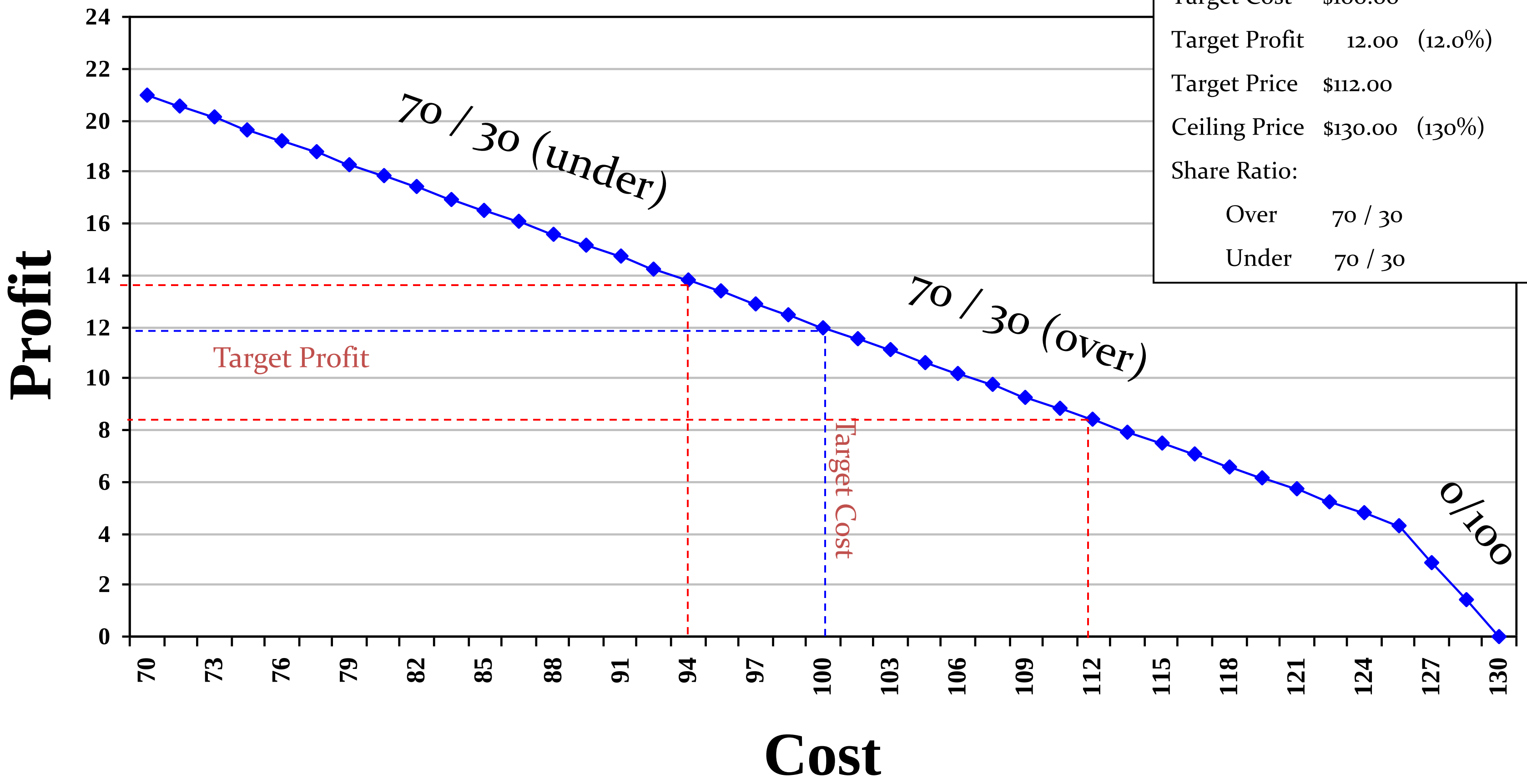
FPIF GRAPH
Alternative Offer Analysis

Target Cost	$100.00	
Target Profit	12.00	(12.0%)
Target Price	$112.00	
Ceiling Price	$130.00	(130%)
Share Ratio:		
Over	70 / 30	
Under	70 / 30	



All three offers are financially identical

Incentive Geometry
Understanding Share Lines

- Any point along the same share line is financially equal as long as:
  - CPIF: Min & Max Fee $ are held constant
  - FPIF: Ceiling Price $ are held constant

Incentive Structures In Negotiations

- Alternative Settlement Offers:

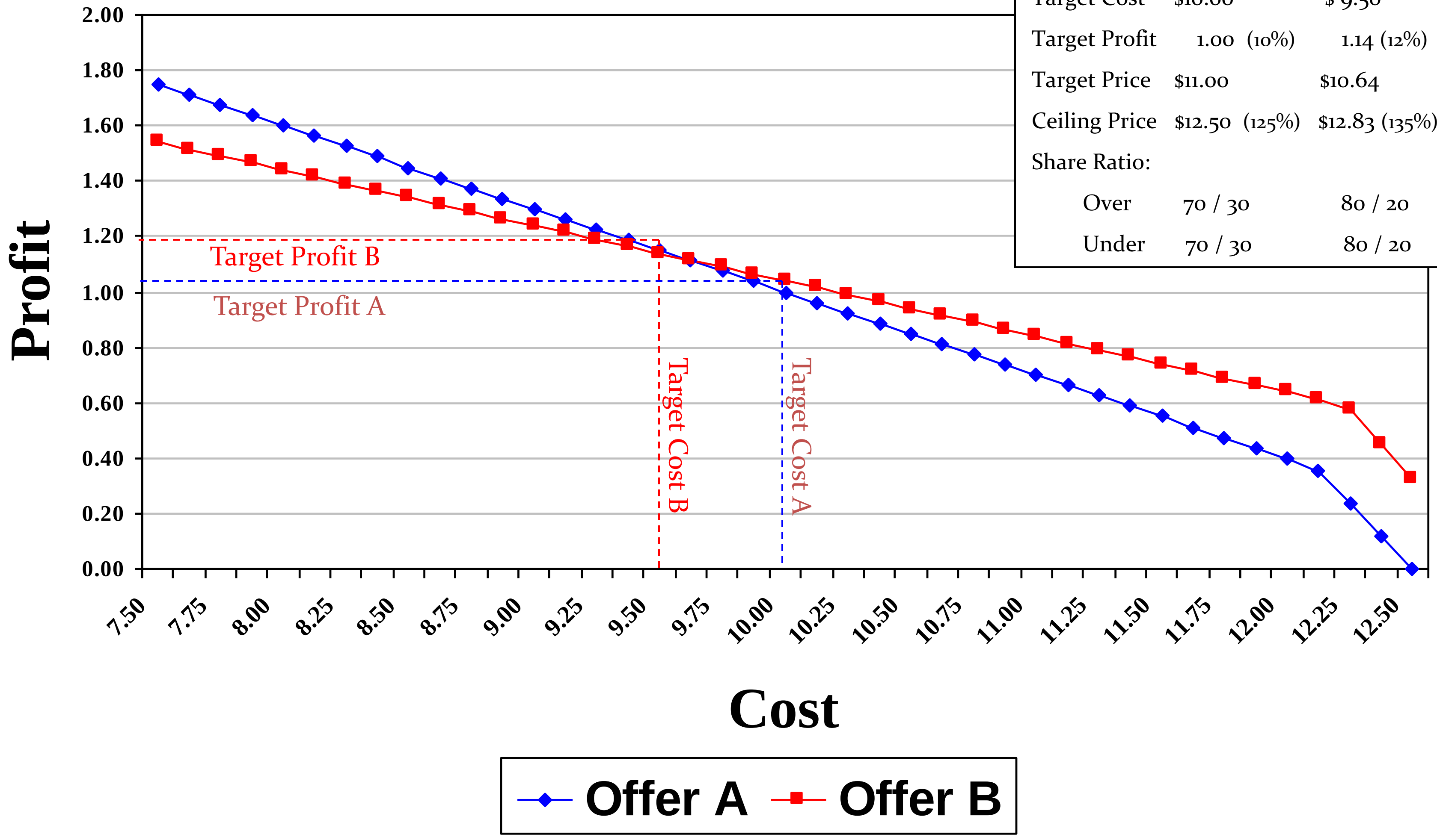
Which would Contractor choose?

	Offer A		Offer B	
Target Cost	$10.00M		$9.50M	
Target Profit	1.00M	10%	1.14M	12%
Target Price	$11.00M		$10.64M	
Ceiling Price	$12.50M	125%	$12.83M	135%
Share Ratio				
Over	70 / 30		80 / 20	
Under	70 / 30		80 / 20	

Answer: It depends!

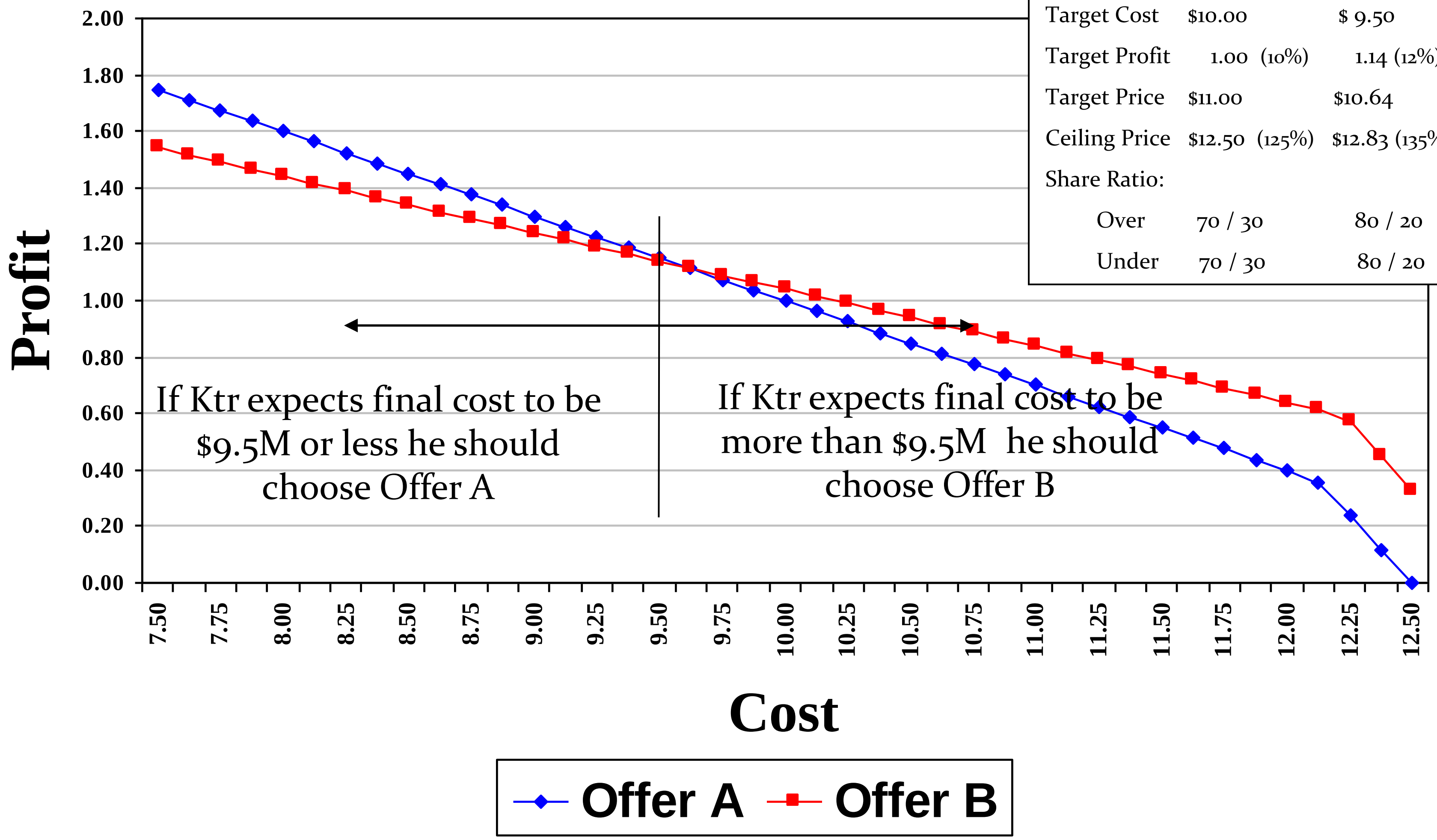
FPIF Alternative Offers ($ Mil)

	Offer A	Offer B
Target Cost	$10.00	$ 9.50
Target Profit	1.00 (10%)	1.14 (12%)
Target Price	$11.00	$10.64
Ceiling Price	$12.50 (125%)	$12.83 (135%)
Share Ratio:		
Over	70 / 30	80 / 20
Under	70 / 30	80 / 20



FPIF Alternative Offers ($ Mil)

	Offer A	Offer B
Target Cost	$10.00	$ 9.50
Target Profit	1.00 (10%)	1.14 (12%)
Target Price	$11.00	$10.64
Ceiling Price	$12.50 (125%)	$12.83 (135%)
Share Ratio:		
Over	70 / 30	80 / 20
Under	70 / 30	80 / 20



Incentive Geometry

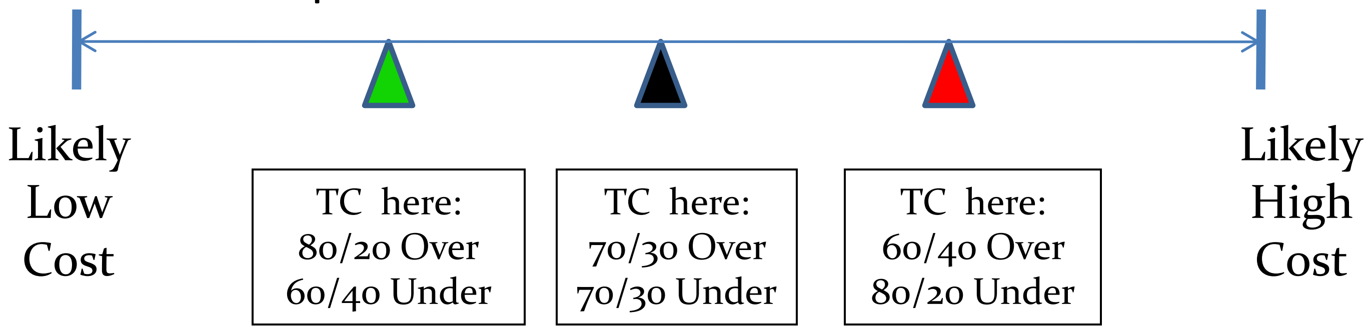
In Negotiations

- Share Lines should be representative of risk
  - Text-book methodology will produce share lines
    - Rarely used in practice to establish share lines
  - Greater cost risk warrants more shallow share lines
    - e.g. 80/20 versus 70/30

Incentive Geometry

In Negotiations

- Split Share Lines
  - Contractor will often propose split share lines
    - e.g. 80/20 Over, 60/40 Under
  - Split share lines are only justified when Target Cost (TC) is not considered to be in the middle of likely cost outcomes
  - Notional Example:



Incentive Geometry

In Negotiations

- Ceiling Price should also be a function of risk

- All elements of cost do not carry equal risk
  - Labor Hour risk is usually greater than Labor Rate risk
    - Rate risk increases w/ accelerating inflation
  - Overhead cost (rates) affected by business base risk
  - Cost risk borne by subcontractor versus prime
    - Example:
      - Negotiated FFP subcontracts represent 60% of Target Cost
      - A 120% Ceiling on prime contract actually represents 150% of prime cost

RECOMMENDED GEOMETRY

The Recommended Geometry

- The recommended geometry is:
  - 50%/50% share ratio over and under target cost
  - Ceiling price set at 120% of target price
- This implies a Point of Total Assumption of about 112%-115% of target price, depending on profit rate.
- Theory is that if both parties have same view of risk, they will share risk equally (50/50).

Communicating Risks

- Communicating about risk and quantifying risks becomes vital in this regime
  - Government analysts understand development risks from Government's perspective
  - Government analysts frequently do not understand development and manufacturing risks from contractor perspective
  - Risks have to be quantified to justify non-standard share ratios or ceilings
  - Cost implications of risk have to be communicated to non-specialist senior leaders for approval
  - Keep it simple and clear!

FINANCIAL IMPACTS OF FPI-F CONTRACTS

Financial Impacts of FPI-F relative to FFP

- Government bears part of the cost risk on FPI
- Pricing of changes has impact on incentive arrangements
- Billing prices must be adjusted with cost level to maintain proper cash flow
- Final Price Revision Proposal sets final prices

Changes – Four Basic Methods

- Fixed amount
- Fixed ratio
- Same incentive arrangement as base contract
- Independent incentive arrangement on change

Changes – Fixed Amount Method

- Parties negotiate target price for change
- Ceiling price is increased by the same dollar amount
- Impact is to tighten ceiling percentage and lower point of total assumption
- Best used for small changes

	Base Contract	Change
Target Cost	1,200,000	50,000
Target Profit	12%	5,000
Target Price	1,344,000	55,000
Ceiling Price	130%	55,000
Share Ratio	70/30	N/A

Changes – Fixed Percentage Method

- Parties negotiate target price for change
- Ceiling price is increased by the same percentage increase for the change relative to target price (same ratio as change to target price)
- Impact ceiling percentage is unchanged, but share ratio can be affected

	Base Contract	Change
Target Cost	1,200,000	50,000
Target Profit	12%	11.5%
Target Price	1,344,000	55,575
Ceiling Price	130%	130%
Share Ratio	70/30	77/23

Changes – Same arrangement as Basic Contract

- Parties negotiate target price for change
- Incentive arrangement for basic contract is applied to change
- Preserves incentive arrangement
- Change may not bear same risks as basic contract, potentially creating mismatch between risk and incentives

	Base Contract	Change
Target Cost	1,200,000	50,000
Target Profit	12%	12%
Target Price	1,344,000	56,000
Ceiling Price	130%	130%
Share Ratio	70/30	70/30

Changes – Independent Arrangement

- Parties negotiate change with its own target price, share ratios, and ceiling price
- Parties may:
  - Add to base contract arrangement, changing whole contract arrangement
  - May price as a separate line item, keeping separate from base contract
- Most complicated change method, but preserves risk/incentive relationship

Changes

- In practice, there is a tendency to treat FPI contracts like cost reimbursable contracts
  - Gov’t team requests small changes without changing price
  - More “constructive” changes
  - Contractor does them to be seen as cooperative
- Contractor must pay attention to all changes because accumulating uncompensated changes degrades incentives!

Billing Prices

- Incentive arrangements are usually set on a total price basis
- At contract award total target price must be translated into billing prices for individual line items (on a unit or total price basis)
- Billing prices are invoice prices for acceptance of delivery or service performance
  - Not contract financing!
- Billing prices only get adjusted upon the request of one of the parties

Billing Price Adjustments

- Contractor needs to seek billing adjustments for:
  - Changes
  - Cost overruns
- Progress payments are *relative to the existing billing prices*
- Failure to increase billing prices may limit progress payments available
- Delays can affect cash flow!

Final Price Revision

- FPR proposal prepared when performance completion is expected
- Takes the form of a firm-fixed price proposal
- Sets the final price(s) based on the terms of the incentive arrangement
- May include estimated final costs
- May be prepared before final negotiated rates are set for final year of performance

Final Price Revision

- FPR is NOT a final voucher
  - Vouchers are not used on FPI contracts!
- Results in a contract modification with final pricing
- Contractor invoices for final prices, less prior billings
- Note: Parties may convert to firm pricing at any point in contract performance

NON-PRICE IMPACTS

Non-price Impacts
versus Firm-Fixed Price Contracts

- More contract administration
  - Changes are more complicated
  - More cost reporting requirements
  - More accounting oversight
  - Billing Prices
- More proposals
- Funds management
- Greater skill level in Contract Mgt staffs
  - More complicated contracts
  - More planning required

Funds Management

- Government must plan ahead for changes in price
  - Reserves for price increases
  - Contract mods to fund current prices
- Contractor needs to do similar forecasts
  - Ensure proper cash flow
  - Ensure price adjustments are funded
- Forecasting cost performance can become important!
  - Avoids work-arounds for funding shortfalls

PREPARING FOR AN FPI-F CONTRACT

Preparing for an FPI-F Contract

- Educate contracting and program management staffs
- Prepare to communicate w/ Government about risk
  - Learn to quantify the cost of risks
- Ensure accounting system can segregate and report costs appropriately
- Plan to manage changes including how to analyze impact of changes on risk management

Preparing for an FPI-F Contract

- Plan to manage billing price regimes
- Prepare to fund overruns, changes
- Prepare proposal staffs for Final Price Revision Proposal

ACC-WARREN PERSPECTIVES

ACC-Warren Perspective

- No “one size fits all.”
- Need to carefully consider contract type and incentive arrangement on a case-by-case basis
- FPI-F likely appropriate for many Engineering and Manufacturing Development contracts
- FPI-F may be appropriate for some low rate production contracts

ACC-Warren Perspective

- Some concern where many changes are likely
  - Costs may not be firm enough for FPI-F
  - Complicated administration
  - Risk/incentive relationship deteriorates
- Strong preference for FFP on production contracts
  - Contractors will still have to make the case for FPI
  - Quantifying risk/cost relationship critical to case

RESOURCES

Resources

- DoD/NASA Incentive Contracts Guide
  - https://acc.dau.mil/adl/en-US/189615/file/32537/DOD%20and%20NASA%20Incentive%20Contracting%20Guide.doc
- NCMA on line resources
  - http://www.ncmahq.org/Publications/resourceguide2011.cfm
  - Search “incentive contracts”

QUESTIONS AND COMMENTS